

REMARKS:

In view of the foregoing amendments and the following remarks please reconsider the amended claims.

In the claims, independent claims 1, 6 and 24 have been amended and previously submitted claim 13 has now been amended in independent form in order to distinguish the present invention from the Examiner's cited references and any other prior art known to the applicant, when considered both alone and for a combination of references.

In amending the claims eight claims have been cancelled and two new claims have been added. One independent claim has been added and accordingly there are now four independent claims.

The Commissioner is hereby authorized to charge fee for the one extra independent claims {1 X \$100 = \$100} for a total of \$100 and any additional fees which may be required, or credit any overpayment to Account No: 01-0310. A duplicate copy of this sheet is enclosed.

With regard to the Examiner's objections under 35 U.S.C. 112, claims 11, 18 through 20 and 22 through 24 have all been amended to overcome the particular language to which the Examiner has objected to in order to overcome the objections.

Turning now to the subject matter of the claims, independent claim 1 has been amended to include the subject matter of previously submitted claims 2 and 4 along with some additional limitations to further define the vertical and lateral angles of deviation of the gripping portion and the tool head supporting portion relative to the main portion of the handle. More particularly, claim 1 now defines that the lateral angle deviation of both the gripping portion and the tool head supporting portion are offset in the same direction relative to the vertical plane. Claim 1 has been further

amended to further specify that the tool head comprises an impact tool head for performing work by impacting a surface. The term impact tool is understood by the applicant to comprise hammers, axes or other garden implements and the like for example.

In the arrangement of now amended claim 1, with the lateral angles of both the gripping and tool head supporting portions being offset in the same direction relative to the vertical plane containing the longitudinal direction of the main portion, a handle for a tool results which improves the user's view of the surface being impacted by the tool. Furthermore, the common lateral angles better balance the tool head relative to the gripping portion to improve the torque reaction as the gripping portion and the tool head supporting portion remain aligned with one another in the longitudinal direction of the main portion. The common lateral direction of the offsets further permits a deviated wrist posture which improves the friction and grip of the tool handle within the user's hand.

The Examiner's only cited reference with regard to compound angles of a tool handle was US 4,109,339 to Dietrich which discloses a toothbrush having a curved handle. The curved handle of Dietrich however is intended solely to improve the reach of the tool head and is not relevant to the torque reaction on the handle of an impact tool as defined in the now amended claim 1. Accordingly therefore it cannot be considered obvious to make use of the teaching of Dietrich in a hand tool having an impact tool head as in the present invention. Furthermore even if the handle of Dietrich were applied to an impact tool, as shown in Figure 5 of that reference, the lateral angles of deviation from a vertical plane extending through the longitudinal direction of the main portion results in the end portion and the tool head supporting portion being offset in opposing directions from the vertical plane rather than being offset in a common direction as defined in the now amended claim 1. As a result,

when supporting the gripping portion in a person's hand with the tool head supporting portion extending away from the person, the main portion of the handle of Dietrich effectively interrupts the view of the user to the surface being worked on so as to provide no improvement over conventional straight tool handles. Even when viewed from the side as shown in figure 1, both the gripping portion and the opposing tool head supporting portion of the handle of Dietrich are offset from the longitudinal direction of the main portion in opposing directions rather than the lateral angle being offset in a common direction as in the now amended claim 1. It is respectfully submitted therefore that claim 1 should now be in condition for allowance.

The present invention is further distinguished in dependent claim 3 which further emphasizes that both the gripping portion and the tool head supporting portion are offset from the main portion by a compound angle while the vertical angles are opposite one another when the lateral angles are in the same direction.

Turning now to independent claim 6, the claim has been amended to include further limitations that the hammer comprise a kit including a plurality of weighted members in which each weighted member is selectively mountable within the opening in the body of the tool head. Claim 6 has been further amended to note that the weighted members each have a different weight and are interchangeable with one another and accordingly claim 6 now includes the subject matter of previously submitted dependent claim 11. Features of previously submitted claim 7 with regard to the fastening means comprising a threaded fastener have also been added to claim 6.

The Examiner raised no previous objections to the subject matter of previously submitted claim 11 with regard to a plurality of interchangeable members of different weight being mountable on the tool head and accordingly the now amended claim 6 should now be in condition for allowance. The Examiner's only basis for

previously rejecting claim 6 comprises US patent 5,758,552 to Myers et al. in which a hammer head is shown secured to the end of a handle by a threaded fastener. No weighted member is provided for selective mounting within the opening in the tool head body nor is there any suggestion that a kit may be provided in which the heads have varying weight from one another. Furthermore none of the other prior art references disclose such a concept of interchangeable weighted members of different weight selectively mountable on the tool head.

Previously submitted dependent claim 13 has been amended in independent form including all of the limitations of the base claim and any intervening claim in order to be in condition for allowance as the Examiner has previously indicated. Use of a compressible member as described in claim 13 assists in damping vibrations in the tool handle in a manner unseen in the prior art.

Independent claim 24 has been amended to include the additional limitations that the handle include a gripping portion and an tool head supporting portion offset from a main portion by respective offset angles. Claim 24 has further been amended to include the limitation that a bore is provided which extends approximately one-third a length of a handle from an opening at the end portion to a terminal end within the handle. In this arrangement, the tension member received in the bore between the head and the terminal end of the bore results in the handle being maintained in compression only between the terminal end of the bore approximately one-third along the length of the handle and the tool head. Accordingly independent claim 24 now includes the subject matter of previously submitted dependent claims 28 and 29.

When providing a tool handle having offset tool head supporting and gripping portions it is important that the bore receiving the tension member terminate at terminal end which is only approximately one-third along the length of the handle so

as not to impose any bending stress on the offset angles of the handle. Furthermore a majority of the stress imposed upon the handle by the impacting tool head is concentrated in the upper third of the length of handle nearest the tool head so that minimizing the length of the tension member to approximately one-third of the length of the length of the handle is sufficient to pre-stress and strengthen the important portion of the tool handle while minimizing the overall weight of the handle to improve the balance and ergonomics thereof.

The Examiner's only references for rejecting previous claims 24, 28 and 29 include US patents 4,753,137 to Kennedy and 2,067,751 to Beegle. Neither disclose an offset gripping portion and tool head supporting portion nor do either disclose a tension member received within a bore which extends approximately one-third of the length of the handle. The threaded fastener of Kennedy has an insufficient length as it does not extend beyond the tool head while Beegle includes a tension member which extends the full length of the handle through to the bottom end of the gripping portion. If a full length tension member as in Beegle were provided in a tool having an offset handle as described in the now amended claim 24 the tension member would impose a bending force on the handle which would produce undesirable stresses on an impact tool in accordance with the present invention. Furthermore the full length rod would permit only minimal offset orientation of the gripping portion and the tool head supporting portion in order to receive the straight rod therethrough otherwise considerable weaknesses would be imposed upon the tool handle at the bending points of the handle. None of the Examiner's prior art references describe the advantages of a hammer having both offset tool head supporting and gripping portions, and accordingly it cannot be considered obvious to provide a solution to the bending stresses imposed upon an offset handle by a full length tension member when there is nothing in the prior art to suggest that the

problem could even be recognized. As the unique structure of tension member extending to the terminal end of a bore which is only approximately one-third the length of the tool handle provides the advantageous benefits of minimizing the weight while maximizing reinforcement at the upper third of the handle nearest the tool head where strength is most needed, without imposing undesirable bending forces upon the handle, it is respectfully submitted that claim 24 should now be in condition for allowance.

Favorable reconsideration of this application is earnestly solicited.

Respectfully submitted

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300, on December 21, 2005

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